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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,258	03/13/2002	Siani Lynne Pearson	B-4528PCT 619575-6	9281
22879 7590 07/11/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER HENEGHAN, MATTHEW E				
ART UNIT 2139		PAPER NUMBER		
NOTIFICATION DATE 07/11/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/088,258

Applicant(s)

PEARSON ET AL.

Examiner

Matthew Heneghan

Art Unit

2139

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,6-10,15-17 and 19-30 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 3,6-10,15-17 and 19-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/8/08
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Claims 3, 6-10, and 15-17, and 19-30 have been examined.
2. In view of the Appeal Brief filed on 25 April 2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection under 35 U.S.C. 112, first paragraph is set forth below.

To avoid abandonment of the application, Applicant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then Applicant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Kristine Kincaid/

Supervisory Patent Examiner, Art Unit 2139

Information Disclosure Statement

3. The following Information Disclosure Statements in the instant application have been fully considered:

IDS filed 8 January 2008.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 30 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure does not use the term "lock the user interface" as recited in the claim. In view of Applicant's arguments (see Appeal Brief, filed 25 April 2008, pp. 16-17), it is unclear how the term would be apprised by one of ordinary skill in the art. The section of the specification that Applicant has cited in the Appeal Brief as supporting this limitation (see Appeal Brief, filed 25 April 2008, p. 4, lines 1-3) does not provide any guidance whatsoever. The limitation is therefore new matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 26 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by WIPO Patent Publication No. 98/44402 to Bramhill et al.

Bramhill discloses a server that securely sends data to an authenticated client. This inherently requires the server to have a memory from which an image of the program having this functionality can be executed. The authentication of the token may involve the use of a token sent to the client to verify that the client has permission and has not been tampered, ensuring that the client restricts use of the data (such as image data, which is displayed at a client) before it is sent (see p. 11, lines 4-17; p. 14, lines 27-29; p. 16, line 20 to p. 17, line 20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,825,879 to Davis in view of U.S. Patent No. 5,517,569 to Clark.

As per claim 25, Davis discloses a client platform having a display and a communications means that is secure by dint of its receiving encrypted data (see column 3, lines 54-61) and an image processing module, the secure video content processor, that stores received images in a frame buffer (memory) and may sends its output directly to (i.e. controls) a display device (see column 3, line 62 to column 4, line 17; column 4, lines 49-55; and column 5, lines 47-59). The SVCP is tamper-proofed, protected physically (see column 4, lines 32-48) and logically (protected key loading, see column 3, lines 27-43) from modification. The signal may be received from an on-line service provider, which inherently employs a server (see column 3, lines 20-26), encrypted with a key for a specific authorized purpose (see column 3, lines 28-43).

Davis does not disclose a mechanism for verifying the integrity of the platform upon user request.

Clark discloses a hardware test in a protected platform in which a user may initiate the verifying of the platform's integrity (see column 5, lines 32-35). One skilled in the art would recognize that it is important for a user to have confidence in the platform that he or she is using.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Davis by implementing it with a user-

initiated integrity check, as disclosed by Clark, so that a user may have confidence in the platform that he or she is using.

Regarding claim 8, by authenticating the received data, Davis' client in effect verifies the trusted status of another platform, the server.

7. Claims 3, 6, 9, 15-17, 19-22, 25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/44402 to Bramhill et al. as applied to claim 26 above and further in view of U.S. Patent No. 5,825,879 to Davis further in view of U.S. Patent No. 5,517,569 to Clark.

Regarding claims 25, 28, and 29, Bramhill does not disclose the physical protection of the client from unauthorized modification.

Davis discloses a tamper-proof client, as disclosed above, that receives image data into a frame buffer and displayed. Davis further suggests that by protecting the data over the entire processing flow, an unauthorized copier will find it more difficult to capture the unencrypted digital representation (see column 2, lines 61-64).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Bramhill by using Davis' tamper-proofing at the client, to make it more difficult to capture the unencrypted digital representation.

Bramhill and Davis do not disclose a mechanism for verifying the integrity of the platform upon user request.

Clark discloses a hardware test in a protected platform in which a user may initiate the verifying of the platform's integrity (see column 5, lines 32-35). One skilled in the art would recognize that it is important for a user to have confidence in the platform that he or she is using.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Bramhill and Davis by implementing it with a user-initiated integrity check, as disclosed by Clark, so that a user may have confidence in the platform that he or she is using.

Regarding claim 3, Bramhill discloses the monitoring of integrity of the client and data flows by comparing current values to initial characteristics (see p. 17, lines 1-20). The integrity of the image may be verified by using a hash (see p. 14, lines 14-19).

Regarding claim 6, 15, and 19, Bramhill discloses that the client (user) initiates data requests (see p. 9, lines 15-29). Though Bramhill does not specifically recite a secure user interface, Davis' modification, which dictates that the transaction must be secure on an end-to-end basis, necessitates a secure user interface to the server from the client as well.

As per claim 9, 17, and 22, Bramhill also discloses the use of a smart card for authentication of the client by the server during a session, which inherently requires a smart card reader (see p. 18, lines 20-25).

Regarding claim 16, different parts of the transaction are being respectively performed at the client and server.

Regarding claim 20, the steps of requesting and receiving transmissions may go on indefinitely.

Regarding claim 21, Bramhill does not disclose the maintaining of usage logs.

Davis discloses the use of metering (usage logs) in such transactions, in order to maintain billing records for transmission to a transaction clearing house (see column 1, lines 60-63).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the invention of Bramhill by using metering, as per Davis, in order to maintain billing records for transmission to a transaction clearing house.

8. Claims 10, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/44402 to Bramhill et al. in view of U.S. Patent No. 5,825,879 to Davis further in view of U.S. Patent No. 5,517,569 to Clark as applied to claims 25 and 29 above, and further in view of U.S. Patent No. 5,990,927 to Hendricks et al.

Bramhill, Davis, and Clark do not disclose the insertion of server-provided into data streams.

Hendricks discloses the integration of advertisements (i.e. not requested by the client) into the program signal (see column 9, lines 16-23), and suggests that because of this, local headends (servers) are not constrained to show only programs transmitted from the operations center (see column 7, lines 61-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Bramhill, Davis, and Clark by allowing for the insertion of advertisements into data streams, as disclosed by Hendricks, so that local headends are not constrained to show only programs transmitted from the operations center.

9. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/44402 to Bramhill et al. in view of U.S. Patent No. 5,825,879 to Davis further in view of U.S. Patent No. 5,517,569 to Clark as applied to claims 25 and 26 above, and further in view of U.S. Patent No. 6,219,788 to Flavin et al.

Bramhill, Davis, and Clark do not disclose the authentication of a protected server-trusted component by a client.

Flavin discloses a computer watchdog system wherein tamper protection may be incorporated at either the server or client in a content distribution system, monitoring other systems, in order to ensure just execution of agreements between a producer and distributor of the content (see abstract).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Bramhill, Davis, and Clark by using Flavin's watchdog system, in order to ensure just execution of agreements between a producer and distributor of the content.

10. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/44402 to Bramhill et al. as applied to claim 26 above and further in view of U.S. Patent No. 5,825,879 to Davis further in view of U.S. Patent No. 5,355,414 to Hale et al.

Regarding claims 25, 28, and 29, Bramhill does not disclose the physical protection of the client from unauthorized modification.

Davis discloses a tamper-proof client, as disclosed above, that receives image data into a frame buffer and displayed. Davis further suggests that by protecting the data over the entire processing flow, an unauthorized copier will find it more difficult to capture the unencrypted digital representation (see column 2, lines 61-64).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Bramhill by using Davis' tamper-proofing at the client, to make it more difficult to capture the unencrypted digital representation.

Bramhill and Davis do not disclose a locking of a user interface.

Hale discloses a security system in which the user interface may be blanked (locked) (see column 13, lines 16-19), so that, in an insecure situation, information visible on the display is not viewable (see column 3, lines 27-33).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Bramhill and Davis by allowing for a

locking display, as disclosed by Hale, so that insecure information on a display is not viewable.

Response to Arguments

11. Regarding claims 26 and 29, though the client disclosed by Bramhill is not as well-protected as that of the instant application, it nonetheless constitutes a trusted component insofar as the term is defined in the instant application's specification. Bramhill does disclose the authentication of the platform, thus establishing a level of trust about the client platform. That the client is programmed in Java is irrelevant. The security of a programming-language is implementation-dependent, and programming languages are not inherently insecure by themselves. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Though Applicant's specification recites some properties commonly associated with trusted systems, the term as discussed in the specification does not preclude the cited art and these features have not been incorporated into the claim language.

Regarding Applicant's argument that Bramhill only discloses a program, Bramhill discloses a program that is installed on an authenticated client (see p. 11, lines 4-5, for example); the client and program must be considered together and do anticipate Applicant's invention as claimed. The fact that Bramhill discloses authentication for the

reasons concerning payment collection does not mean that the client running the program is not a "trusted component."

Regarding Applicant's argument that the display is not being controlled from within the trusted component, Bramhill's disclosure clearly shows that the images being displayed are being controlled by software in the authenticated client to display received non-functional descriptive material or, alternatively, error messages (see p. 14, lines 21-29).

Regarding Applicant's argument to claim 29 that Bramhill does not use a token any block of data containing relevant information constitutes a token. The transmission disclosed by Bramhill therefore is a token.

Regarding Applicant's argument that Bramhill's invention does not check for tampering, that property is also not explicitly claimed, and is not inherently necessary for a component to be "trusted."

12. Regarding Applicant's argument over claims 8 and 25, Davis' invention clearly includes protection against the use of unauthorized keys, including the encrypting of decryption keys used by the SVCP, which one skilled in the art would recognize as potentially frustrating an attempt to misuse the system, rather than simply the display. Since such encryption frustrates attempts at modification by anyone not having the proper key, it constitutes "logical protection." It therefore enjoys some protection from unauthorized modification insofar as the limitation has been recited in the claims.

Regarding Applicant's argument that one skilled in the art would not be motivated to incorporate Clark's teachings into the invention of Davis, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). It is noted that, when there is a desire to make a system secure, it is reasonable for one skilled in the art to add additional layers of security to an invention. Though headend systems are typically installed in home environments, they can also be found in more secure locations. "Users" in a deployment may just be the customers themselves (who themselves may have reasons for having an untampered system), but may also be technicians from the service provider; moreover, the references are analogous in nature and would reasonably be combined by one skilled in the art without any specific motivation.

Regarding Applicant's argument with respect to claim 8, that the authentication of data does not verify the trusted status of a source, it is noted that since data from a bad source would fail the authentication check, a successful authentication affirms that a source is, at least to some extent, trustworthy. Applicant's asserts that Davis does not disclose an authentication check; however, Applicant is not claiming an authentication per se and, since the success of a transaction at the client is dependent upon the trustworthiness of the transmitting platform, Davis' system effectively verifies the other platforms' integrity.

13. Regarding Applicant's argument over claims 3, 6, 9, 15-17, 19-22, 25, 28, and 29, In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicant has argued that one skilled in the art would not be motivated to modify Bramhill's invention using Davis and Clark. Bramhill does not give specifics as to what kind of display should be used. Davis and Clark's invention is a display controller, and can therefore easily be combined into Bramhill to fulfill that role. Since each invention contributes attributes that make the whole system more secure, it would be obvious to combine them all in order to enjoy greater overall security. Though Bramhill and Davis take different approaches to security, the approaches are not at all mutually exclusive and there is no reason to believe that the two inventions could not be combined without undue effort, given that one is primarily a software implementation and the other is in hardware. The stated grounds of rejection sufficiently establish obviousness.

14. Regarding claim 30, Applicant's argument that the user interface is considered to be locked if and only if all of the parts of the user interface are disabled. Since the user interface is dependent upon the display, the loss of the display renders the user

interface useless, thus effectively locking it, since the ability to use a keyboard is severely limited when the user cannot receive any feedback. Applicant's specification gives no guidance as to how the term "locked" should be interpreted, prompting the new rejection under 35 U.S.C. 112, first paragraph, above. Since Hale's modification provides further protection from misuse over and above that provided in the other references, one skilled in the art would reasonably be motivated to incorporate it in order to further enhance security.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached at (571) 272-4063.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Art Unit: 2139

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Matthew Heneghan/

Primary Patent Examiner, USPTO AU 2139

July 9, 2008